BLAUPUNKT

BRIDGEABLE QUADRO STEREO AMPLIFIER

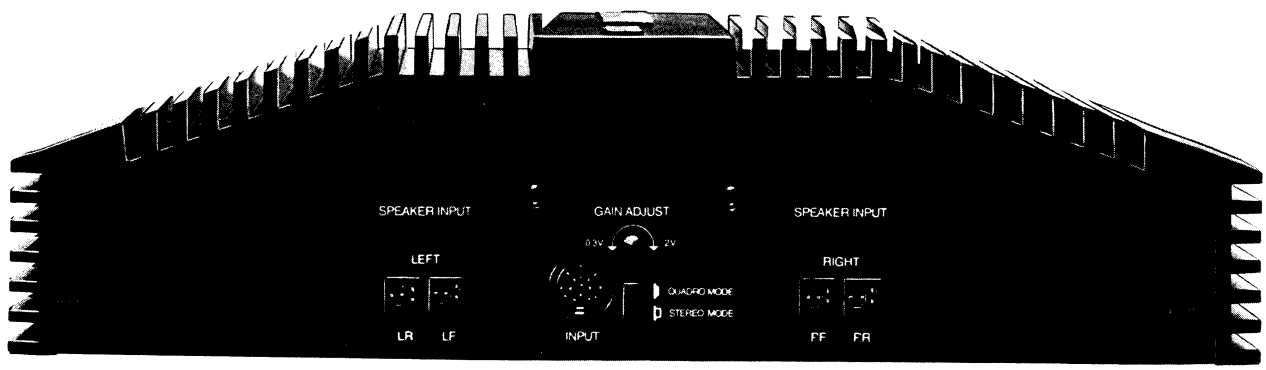
BQA 208

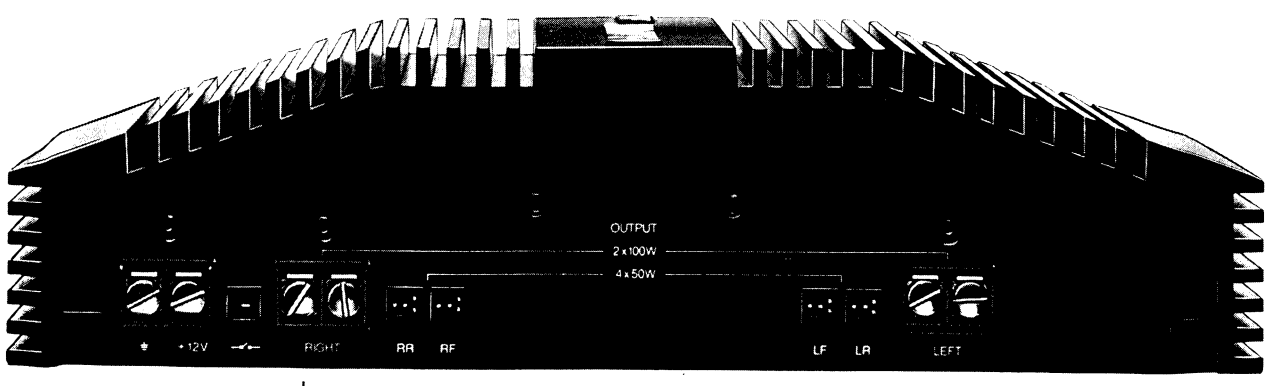
7 607 579 010

Kundendienstschrift
Service Manual
Manuel de service
Manual de servicio

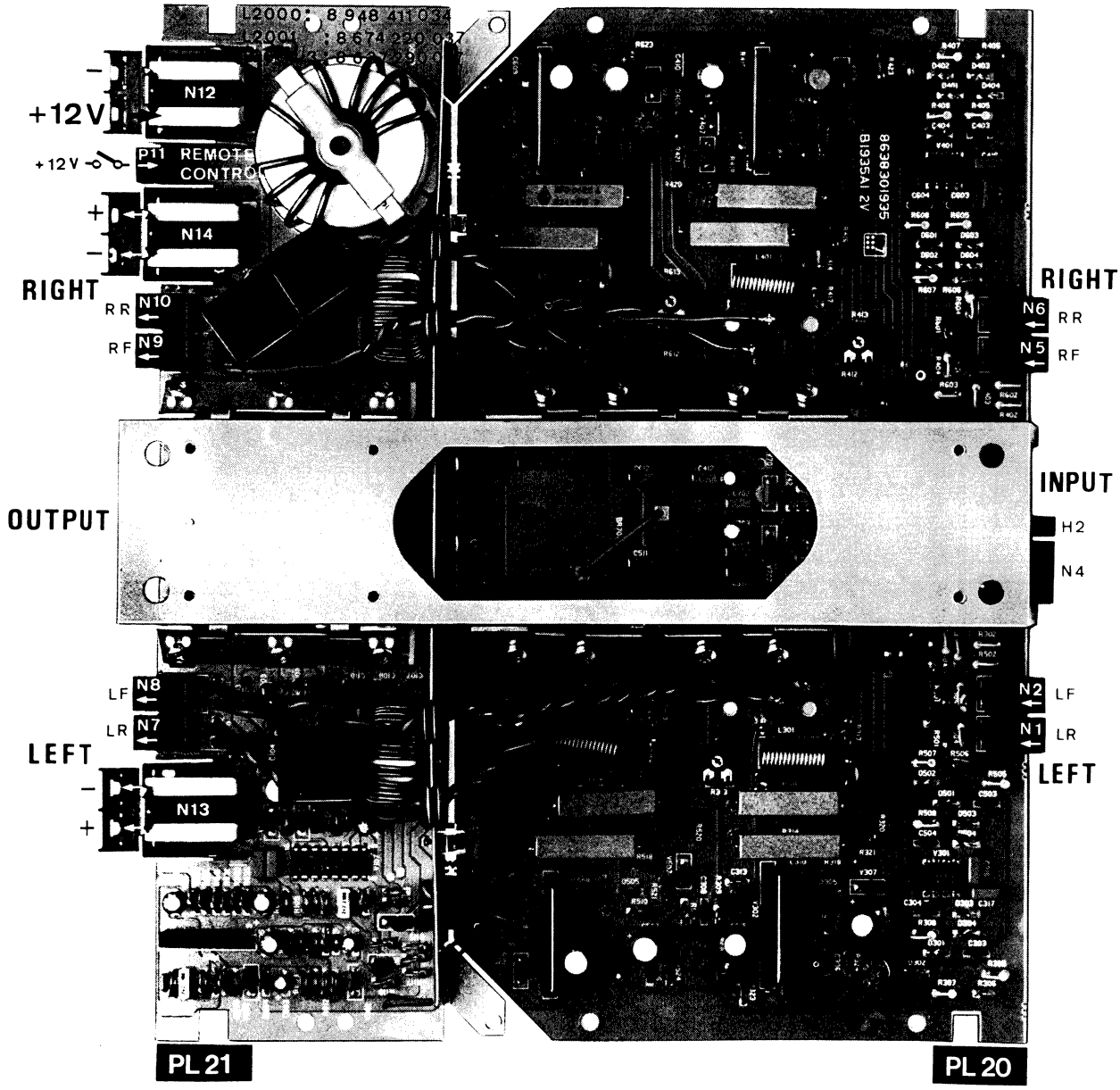
Su. 12. 88 (D) (GB) (F) (E) BP/VKD 3 D88 440 002

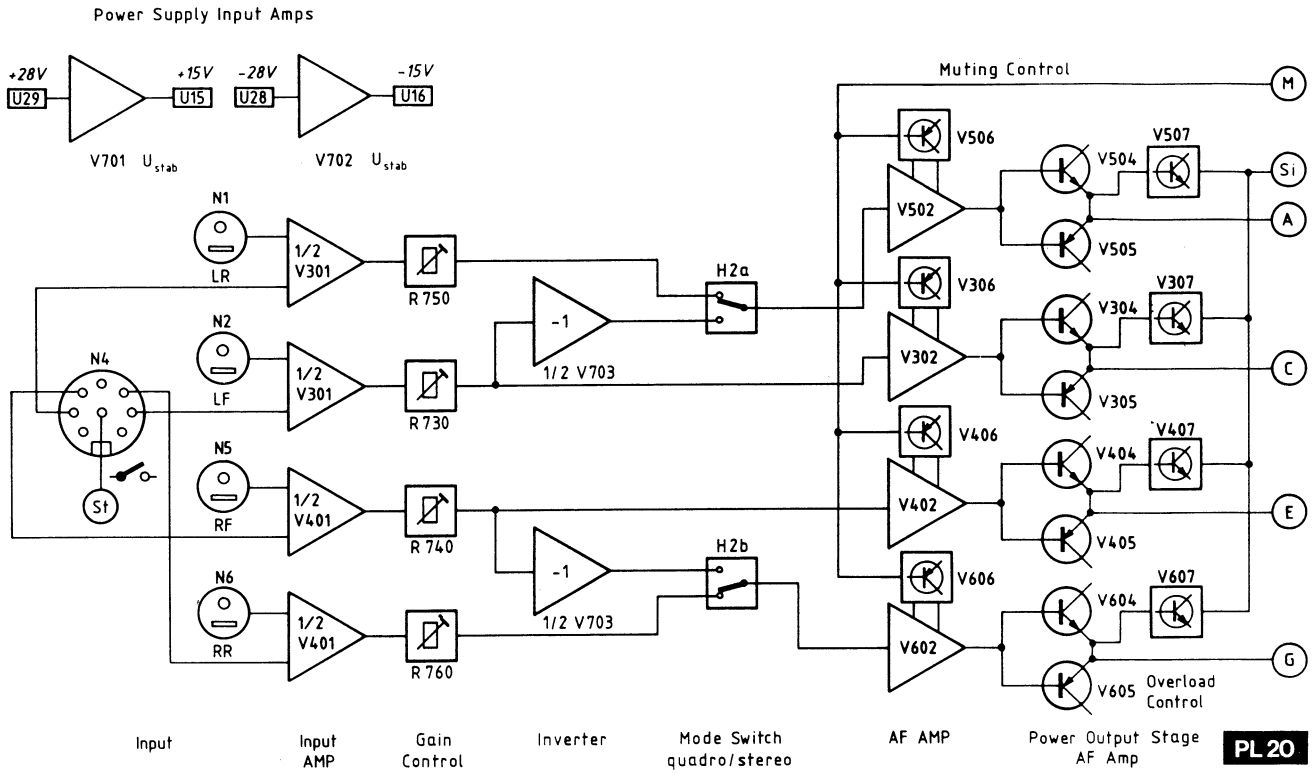
Technische Daten	Technical Data	Données techniques	Datos técnicos	
Betriebsspannung:	Supply voltage:	Tension d'alimentation:	Potencia de salida:	12 V (Service 14 V)
Stromaufnahme:	Power consumption:	Consommation:	Consumo:	I_{min} 1,3 A I_{max} 30 A
Übertragungsbereich:	Transmission range:	Bande passante:	Gama de transmisión:	3 Hz – 100 kHz – 3 dB
Nennleistung: Quadro	Nominal power: Quadro	Puissance nominale: Quadro	Potencia nominal: Quadro	4 x 50 W (4 Ω)
Nennleistung: Stereo	Nominal power: Stereo	Puissance nominale: Stéréo	Potencia nominal: Estereo	2 x 100 W (4 Ω)
Lautsprecherausgang:	Speaker output:	Sortie H-P:	Salida de altavoz:	4 Ω je Kanal
Übersprechdämpfung:	Crosstalk attenuation:	Diaphonie:	Diafonía:	60 dB
Klirrfaktor:	Distortion:	Distorsion:	Distorsión:	0.04 % (0.5 W/1 kHz)
Gain ADJUST (R 730, R 740, R 750, R 760) Regler zum Anpassen des Amplifier Eingangs an die Autoradio-Ausgangsspannung.	Gain ADJUST (R 730, R 740, R 750, R 760) to adjust the Amplifier input to the output voltage of the car radio.	Gain ADJUST (R 730, R 740, R 750, R 760) pour adapter l'entrée Amplifier à la tension de sortie de l'autoradio.	Gain ADJUST (R 730, R 740, R 750, R 760) Regulador para adaptar la entrada de Amplifier a la tensión de salida del autorradio.	0.3 V – 2 V

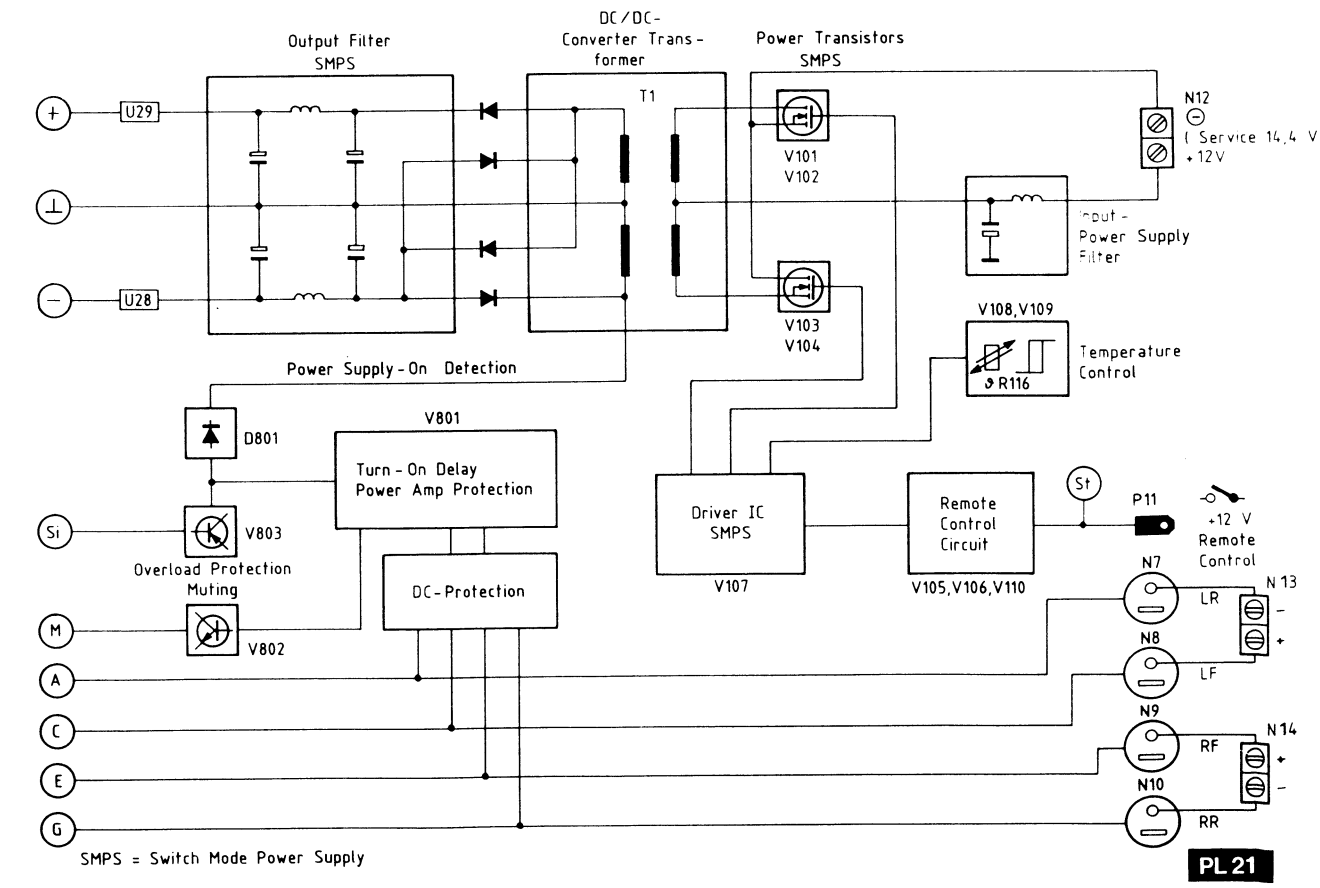




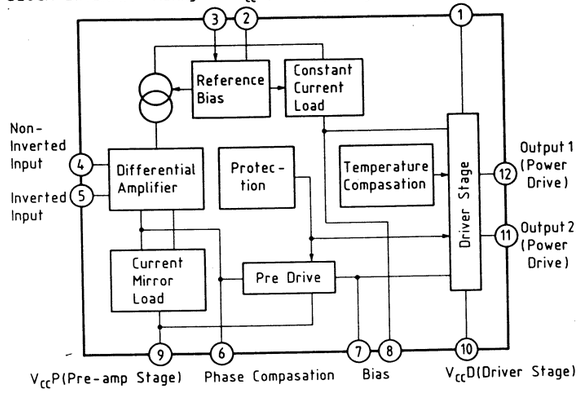
+ – – +


+12V
N12
+12V
P11 REMOTE CONTROL
N14
RIGHT
RR N10
RF N9
RIGHT
N6 RR
N5 RF
OUTPUT
INPUT
H2
N4
LF N8
LR N7
LEFT
N13
N2 LF
N1 LR
LEFT
PL 21
PL 20


Power Supply Input Amps
+28V
U29
+15V
U15
-28V
U28
-15V
U16
V701 U_{stab}
V702 U_{stab}
Muting Control
M
N1
LR
1/2 V301
R 750
N2
LF
1/2 V301
R 730
N4
St
N5
RF
1/2 V401
R 740
N6
RR
1/2 V401
R 760
-1
1/2 V703
H2a
-1
1/2 V703
H2b
V506
V502
V306
V302
V406
V402
V606
V602
V504
V505
V507
V304
V305
V307
V404
V405
V407
V604
V605
V607
Si
A
C
E
G
Overload Control
Input
Input AMP
Gain Control
Inverter
Mode Switch quadro/stereo
AF AMP
Power Output Stage AF Amp
PL 20


Output Filter SMPS
DC/DC-Converter Trans-former
T1
Power Transistors SMPS
U29
U28
V101
V102
V103
V104
N12
(Service 14,4 V)
+12V
Input-Power Supply Filter
V108,V109
Temperature Control
R116
Power Supply-On Detection
D801
V801
Turn-On Delay Power Amp Protection
DC-Protection
V803
Overload Protection Muting
V802
Driver IC SMPS
V107
Remote Control Circuit
V105,V106,V110
St
P11
+12 V Remote Control
N7
LR
N13
N8
LF
N9
RF
N14
N10
RR
Si
M
A
C
E
G
SMPS = Switch Mode Power Supply
PL 21

BLOCK DIAGRAM Muting $+V_{CC}P$(Pre-amp Stage) $+V_{CC}D$(Driver Stage)



V302

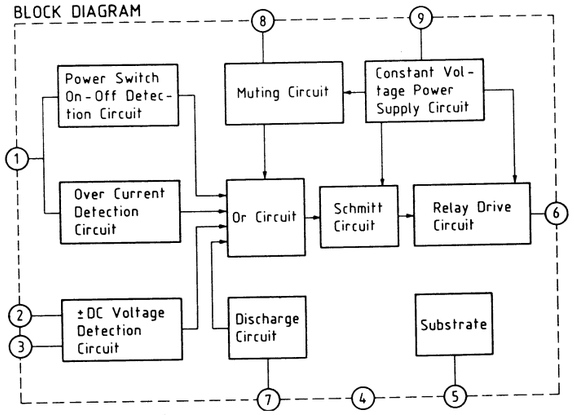
V402

V502

V602

(PL20)

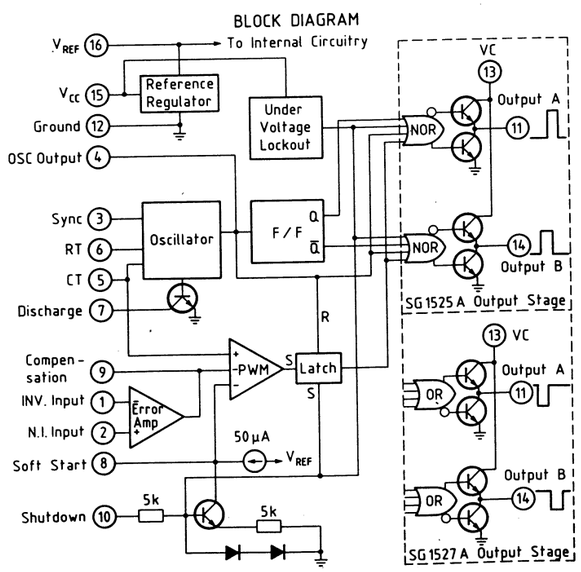
BLOCK DIAGRAM



V801

(PL21)

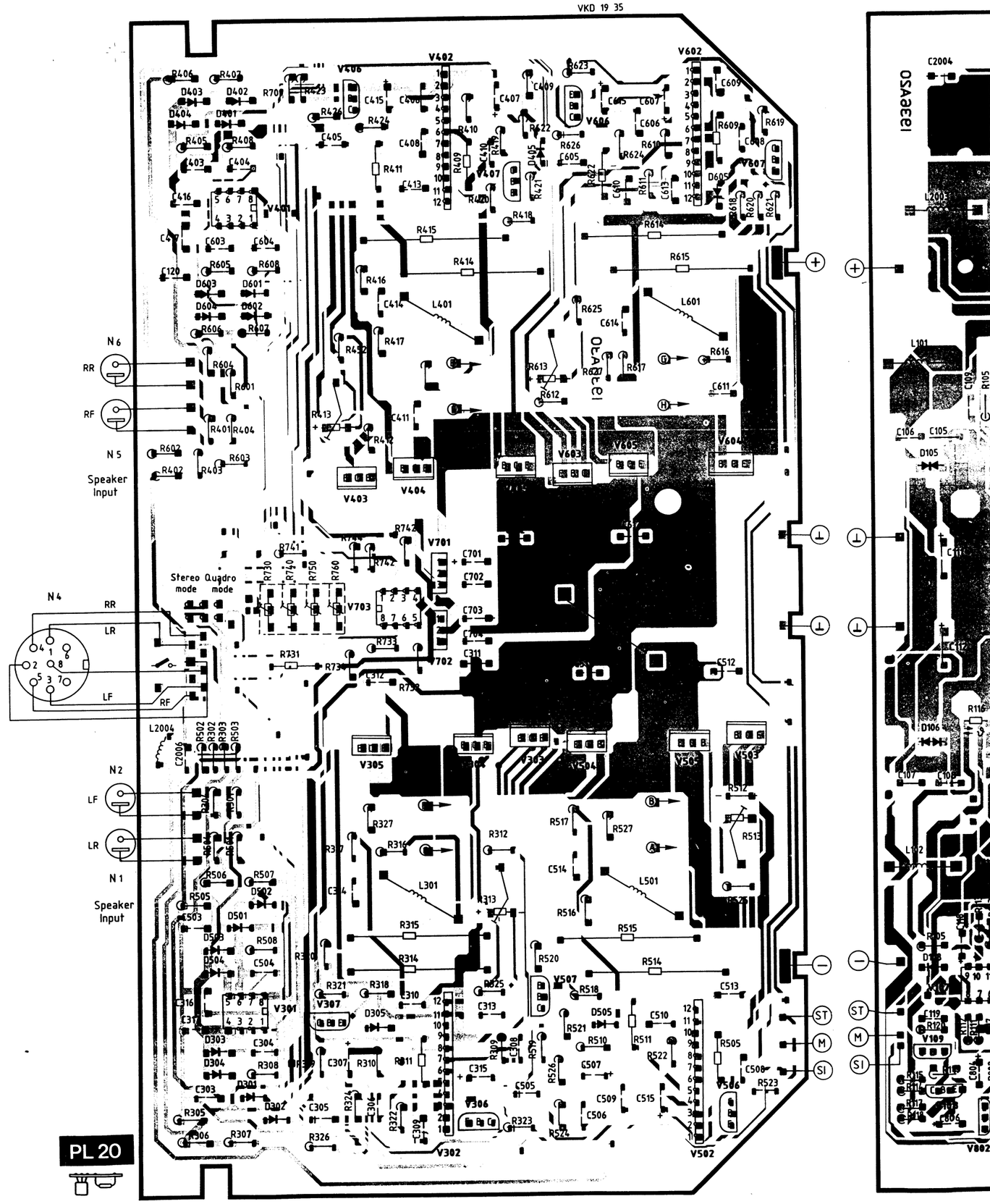
BLOCK DIAGRAM

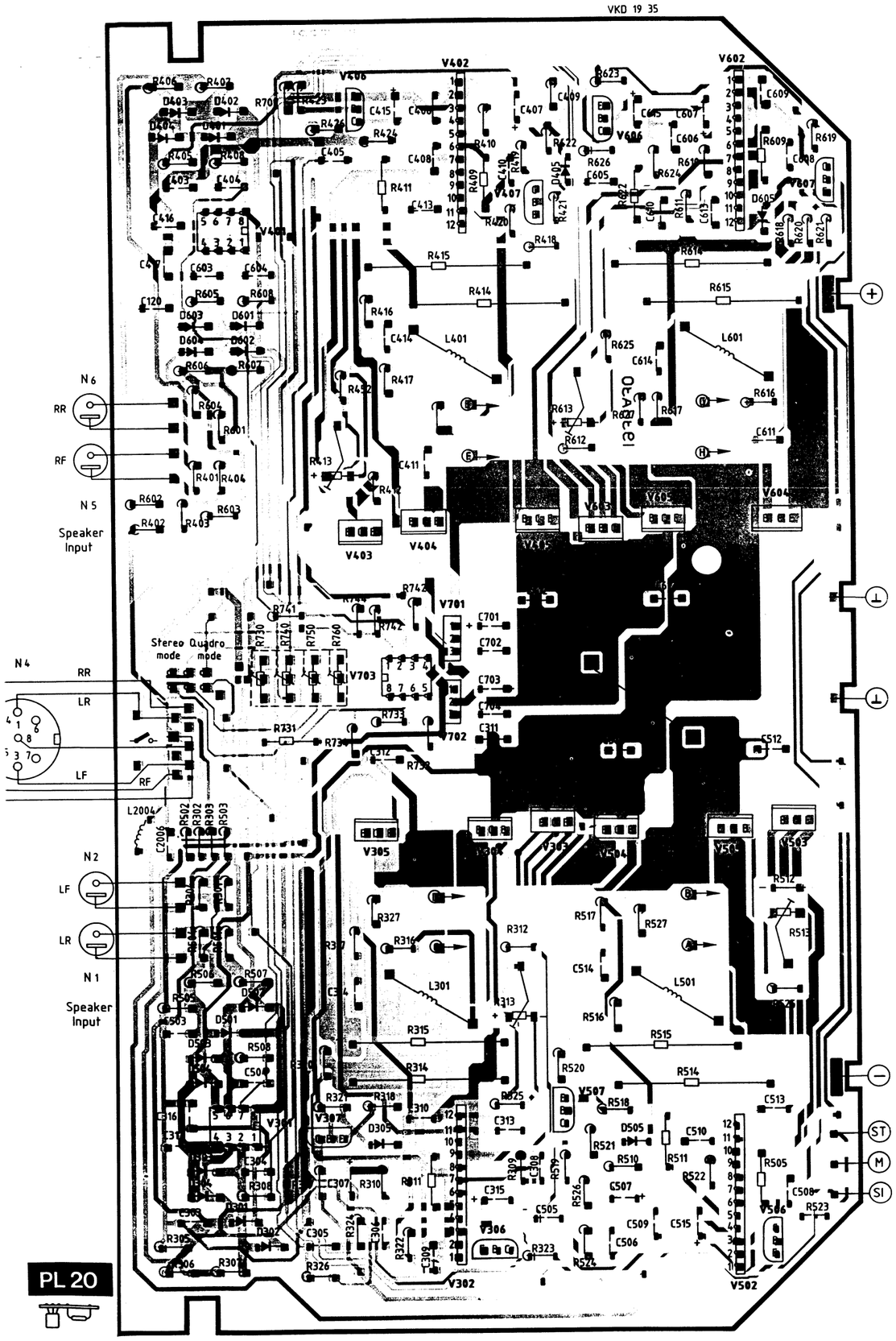


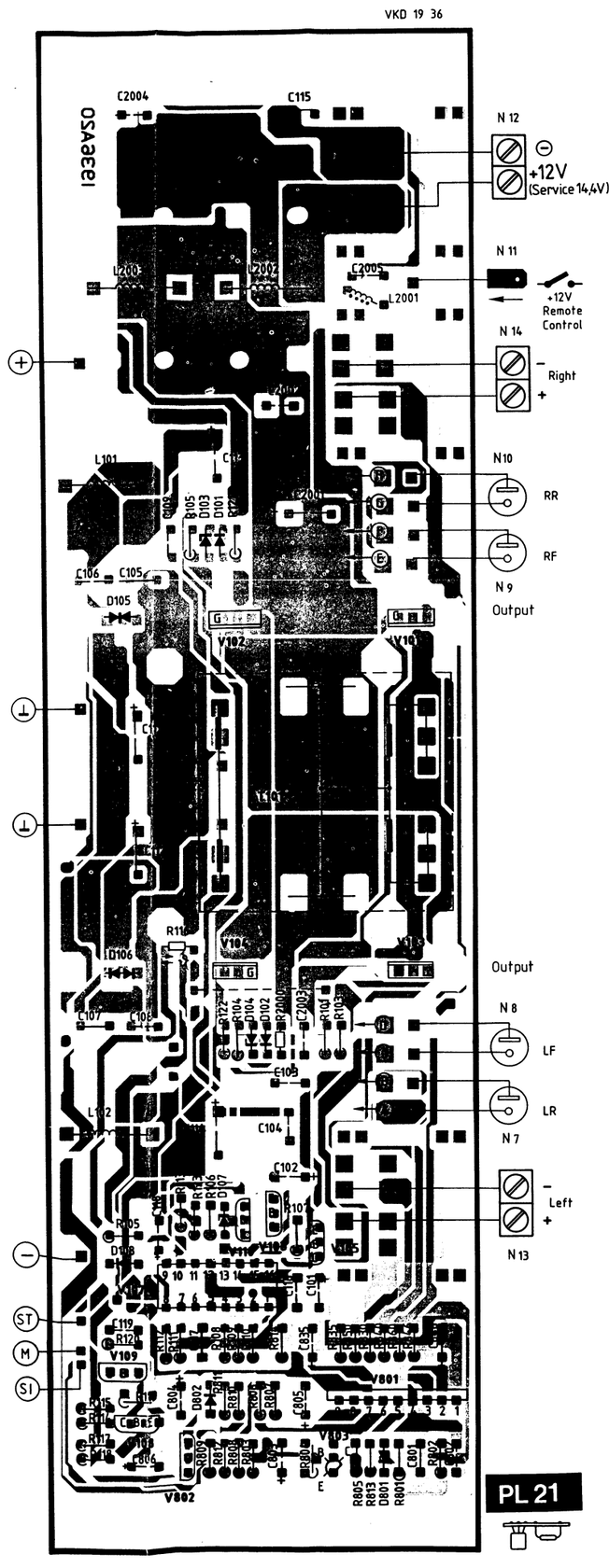
V107

(PL21)

VKD 19 35







(D)

Gain ADJUST (R 730, R 740, R 750, R 760)

Regler zum Anpassen des Amplifier Eingangs an die Autoradio-Ausgangsspannung.

Ruhestromeinstellung

Mit dem Regler R 313 die Spannung über R 314 so einstellen, daß der Spannungsabfall 9 mV ± 3 mV. Mit dem Regler R 413 die Spannung über R 414, mit R 513 über R 514 und R 613 über R 614 analog. Nachdem alle restlichen Messungen durchgeführt worden sind, müssen die Spannungen über R 414, R 314, R 514 und R 614 nochmals gemessen und gegebenenfalls korrigiert werden.

(GB)

Gain ADJUST (R 730, R 740, R 750, R 760)

to adjust the Amplifier input to the output voltage of the car radio.

Adjustment of closed-circuit current

Use control R 313 to adjust the voltage across R 314 to result in a voltage drop of 9 mV ± 3 mV. Use controls R 413, R 513, R 613 to adjust the voltages across R 414, R 514, R 614, resp., to the same value. When all other measurements have been performed, the voltages across R 414, R 314, R 514 and R 614 must be measured once again and corrected, if necessary.

(F)

Gain ADJUST (R 730, R 740, R 750, R 760)

pour adapter l'entrée. Amplifier le tension de sortie de l'autoradio.

Ajustage de courant de repos

Ajuster la tension à travers R 314 par l'intermédiaire du réglage R 131 pour que la chute de tension soit de 9 mV ± 3 mV. Utiliser les réglages R 413, R 513, R 613 pour ajuster les tensions à travers R 414, R 514, R 614 respectivement aux mêmes valeurs. Après avoir effectué toutes autres mesures, les tensions à travers R 414, R 314, R 514 et R 614 doivent être mesurées de nouveau et corrigées, le cas échéant.

(E)

Gain ADJUST (R 730, R 740, R 750, R 760)

Regulador para adaptar la entrada de Amplifier a la tensión de salida del autorradio.

Ajuste de corriente de régimen de reposo

Ajustar la tensión con R 313 por R 314 de manera que la caída de tensión sea de 9 mV ± 3 mV. Ajustar las tensiones por R 414, R 514, R 614 con los reguladores R 413, R 513, R 613 para obtener el mismo valor. Después de haber efectuado todos los otros ajustes, mesurar de nuevo las tensiones por R 414, R 314, R 514 y R 614 y corregirlas en caso necesario.

VKD 19 35

PL 20

Input

V701 MC 78 L15 8 945 901 659

V702 MC 79 L15 8 945 901 658

V703 LM 833 N 8 945 901 909

V301, LM 833 N
V401 8 945 901 909

ohne Bezeichnung: 1 N 4148
without marking: 8 905 405 742

V506 BC 558C 8 905 707 459

V504 2 SC 2527 8 945 705 527

V507 BC 548 B 8 905 707 416

V502 µPC 1270 8 945 901 660

V503 BD 135-10 8 905 707 250

V505 2SA1077 8 945 705 526

V606 BC 558 C 8 905 707 459

V604 2 SC 2527 8 945 707 527

V607 BC 548 B 8 905 707 416

V602 µPC 1270 8 945 901 660

V603 BD 135-10 8 905 705 250

V605 2SA1077 8 945 705 526

V306 BC 558 C 8 905 707 459

V304 2 SC 2527 8 945 705 527

V307 BC 548 B 8 905 707 416

V302 µPC 1270 8 945 901 660

V303 BD 135-10 8 905 707 250

V305 2SA1077 8 945 705 526

V406 BC 558 C 8 905 707 459

V404 2 SC 2527 8 945 705 527

V407 BC 548 B 8 905 707 416

V402 µPC 1270 8 945 901 660

V403 BD 135-10 8 905 705 250

V405 2SA1077 8 945 705 526

VKD 19 36

PL 21

V703 ½ V703 LM 833 N 8 945 901 909 V703 ½

R731 5,6k R732 2,7k R733 5,6k R734 6,8k R741 5,6k R742 2,7k R743 5,6k R744 6,8k

H2b

V506 BC 558C 8 905 707 459 V504 2 SC 2527 8 945 705 527 V507 BC 548 B 8 905 707 446

V502 µPC 1270 8 945 901 660 LR V505 2SA1077 8 945 705 526 V503 BD 135-10 8 905 707 250

V606 BC 558 C 8 905 707 459 V604 2 SC 2527 8 945 705 527 V607 BC 548 B 8 905 707 446

V602 µPC 1270 8 945 901 660 RR V605 2SA1077 8 945 705 526 V603 BD 135-10 8 905 705 250

V306 BC 558 C 8 905 707 459 V304 2 SC 2527 8 945 705 527 V307 BC 548 B 8 905 707 446

V302 PC 1270 8 945 901 660 LF V305 2SA1077 8 945 705 526 V303 BD 135-10 8 905 707 250

V406 BC 558 C 8 905 707 459 V404 2 SC 2527 8 945 705 527 V407 BC 548 B 8 905 707 446

V402 µPC 1270 8 945 901 660 RF V405 2SA1077 8 945 705 526 V403 BD 135-10 8 905 705 250

+28V U29 U28 -28V

V803 BC 558 B 8 905 707 458 V801 TA 7317 P 8 945 901 657 V802 BC 548 B 8 905 707 416 D801 D802

V101 BUZ 11 8 945 705 888 V102 BUZ 11 8 945 705 888 V103 BUZ 11 8 945 705 888 V104 BUZ 11 8 945 707 888

D105 FMG 21 S 8 945 405 666 D106 FMG 21 R 8 945 405 667 D103 ZPD 39 8 945 421 280 D101 D104 ZPD 39 8 945 421 280 D102 D107 ZTE 2 8 945 421 221

T101 8 637 220 149 L 2000 8 948 411 034 ab/fromFD 943 L2002 8 637 290 037 L 2001 8 674 220 037 L2003 8 637 290 037

V107 SG 3525 8 945 901 662 V109 BC 548 B 8 905 707 416 V108 V105 BC 558 B 8 905 707 458 V110 BC 558 B 8 905 707 458 V106 BC 548 B 8 905 707 416

ohne Bezeichnung without marking: 1 N 4148 8 905 405 742

Output Left Right LR LF RF RR

P11 +12V Remote Control

N12 +12V (Service 14,4V)

Ersatzteilliste — Spare Parts List — Liste de rechanges — Lista de repuestos

SCHALTERKNOPF	SWITCH KNOB	BOUTON DE COMM.	BOTON CONMUTADOR	8 632 062 161
BATTERIELEITUNG	BATTERY LINE	LIGNE DE BATTERIE	LINEA DE BATERIA	8 634 493 311
SICHERUNGSEINSATZ 30 A	FUSE CARTRIDGE	CARTOUCHE DE COUPE-CIRCUIT	CARTUCHO P. FUSIBLE	1 191 017 004
KABELDURCHFÜHRUNG	CABLE LEAD-TROUGH	TRAVERSEE DE CABLE	BOQUILLA DE PASO	8 630 360 104
SICHERUNGSDOSE	FUSE BOX	BOITE A FUSIBLE	CAJA DE FUSIBLE	8 630 690 254
SECHSKANTSCHRAUBE 6 x 20	HEX. HEAD SCREW	VIS HEX.	TORNILLO EXAGONAL	2 911 051 201
ISOLIERSCHEIBE	INSULATING DISC	DISQUE ISOLANT	DISCO AISLADOR	8 630 161 548
GLIMMERSCHEIBE	MICA LAMINATION	RONDELLE DE MICA	ARANDELA MICA	8 630 161 546
ISOLIERSCHEIBE	INSULATING DISC	DISQUE ISOLANT	DISCO AISLADOR	8 630 161 549
GLIMMERSCHEIBE	MICA LAMINATION	RONDELLE DE MICA	ARANDELA MICA	8 630 161 547
LAUTSPRECHERBUCHSE	SPEAKER JACK	PRISE DE H-P	HEMBRILLA P. ALTAVOZ	8 908 613 464
STECKERBUCHSE	PLUG JACK	PRISE DE FICHE	HEMBRILLA P. ENCHUFE	8 634 391 876
HALTEKÖRPER	SUPPORTING BODY	PARTIE DE RETENUE	PARTE DE RETENCION	8 631 060 133
STECKDOSE 8-POLIG	SOCKET	PRISE FEMELLE	CAJA DE ENCHUFE	8 908 613 628
TASTSCHALTER	PUSH BUTTON	POUSSOIR	PULSADOR	8 908 043 569

C 101	4,700 UF	35,0	V	8 903 490 112
C 102	4,700 UF	35,0	V	8 903 490 112
C 111	2200,000 UF	40,0	V	8 943 481 077
C 112	2200,000 UF	40,0	V	8 943 481 077
C 113	2200,000 UF	40,0	V	8 943 481 077
C 114	2200,000 UF	40,0	V	8 943 481 077
C 120	2,200 UF	40,0	V	8 923 481 162
C 305	10,000 UF	40,0	V	8 923 481 544
C 307	100,000 UF	25,0	V	8 903 481 407
C 315	100,000 UF	25,0	V	8 903 481 407
C 405	10,000 UF	40,0	V	8 923 481 544
C 407	100,000 UF	25,0	V	8 903 481 407
C 415	100,000 UF	25,0	V	8 903 481 407
C 505	10,000 UF	40,0	V	8 923 481 544
C 507	100,000 UF	25,0	V	8 903 481 407
C 515	100,000 UF	25,0	V	8 903 481 407
C 605	10,000 UF	40,0	V	8 923 481 544
C 607	100,000 UF	25,0	V	8 903 481 407
C 615	100,000 UF	25,0	V	8 903 481 407
C 701	10,000 UF	35,0	V	8 903 470 539
C 703	10,000 UF	35,0	V	8 903 470 539
C 803	10,000 UF	16,0	V	8 903 470 325
C 804	0,470 UF	50,0	V	8 943 403 126
C 805	22,000 UF	16,0	V	8 903 700 317
C 806	22,000 UF	16,0	V	8 903 700 317
C 835	100,000 UF	10,0	V	8 903 470 213
C 846	100,000 UF	10,0	V	8 903 470 213
C2001	2200,000 UG	25,0	V	8 943 499 028

D 101	1N4148	8 905 405 742
D 102	1N4148	8 905 405 742
D 103	ZPD 39	8 945 421 280
D 104	ZPD 39	8 945 421 280
D 105	FMG-21S R	8 945 405 666
D 106	FMG-21R R	8 945 405 667
D 107	ZTE 2	8 945 421 221
D 301	1N4148	8 905 405 742
D 302	1N4148	8 905 405 742
D 303	1N4148	8 905 405 742
D 304	1N4148	8 905 405 742
D 305	1N4148	8 905 405 742
D 401	1N4148	8 905 405 742
D 402	1N4148	8 905 405 742
D 403	1N4148	8 905 405 742
D 404	1N4148	8 905 405 742
D 405	1N4148	8 905 405 742
D 501	1N4148	8 905 405 742
D 502	1N4148	8 905 405 742
D 503	1N4148	8 905 405 742
D 504	1N4148	8 905 405 742
D 505	1N4148	8 905 405 742
D 601	1N4148	8 905 405 742
D 602	1N4148	8 905 405 742
D 603	1N4148	8 905 405 742
D 604	1N4148	8 905 405 742
D 605	1N4148	8 905 405 742
D 801	1N4148	8 905 405 742
D 802	1N4148	8 905 405 742

3 D88 340 002

Ersatzteilliste — Spare Parts List — Liste de rechanges — Lista de repuestos

L 101	637 290 038
L 102	637 290 038
L 301	634 210 425
L 401	634 210 425
L 501	634 210 425
L 601	634 210 425
L2000	948 411 034
L2001	674 220 037
L2002	637 290 037
L2003	637 290 037

KR = K-OHM / R = OHM

R 116	100,000 KR	350,0 MW	941 300 030
R 301	8,200 R	700,0 MW	900 669 019
R 313	5,000 KR	150,0 MW	901 506 028
R 314	0,240 R	5,0 W	941 091 037
R 315	0,240 R	5,0 W	941 091 037
R 401	8,200 R	700,0 MW	900 669 019
R 413	5,000 KR	150,0 MW	901 506 028
R 414	0,240 R	5,0 W	941 091 037
R 415	0,240 R	5,0 W	941 091 037
R 501	8,200 R	700,0 MW	900 669 019
R 513	5,000 KR	150,0 MW	901 506 028
R 514	0,240 R	5,0 W	941 091 037
R 515	0,240 R	5,0 W	941 091 037
R 601	8,200 R	700,0 MW	900 669 019
R 613	5,000 KR	150,0 MW	8 901 506 028
R 614	0,240 R	5,0 W	8 941 091 037
R 615	0,240 R	5,0 W	8 941 091 037
R 730	50KR 4X 50MW		8 941 480 003
R 740	50KR 4X 50MW		8 941 480 003
R 750	50KR 4X 50MW		8 941 480 003
R 760	50KR 4X 50MW		8 941 480 003

T 101	8 637 220 149

V 101	BUZ 11	8 945 705 888
V 102	BUZ 11	8 945 705 888
V 103	BUZ 11	8 945 705 888
V 104	BUZ 11	8 945 705 888
V 105	BC 558B	8 905 707 458
V 106	BC 548B	8 905 707 416
V 107	SG 3525 AN	8 945 901 662
V 108	BC 548B	8 905 707 416
V 109	BC 548B	8 905 707 416
V 110	BC 558B	8 905 707 458
V 301	LM 833	8 945 901 909
V 302	UPC 1270H	8 945 901 660
V 303	BD 135-10	8 905 705 250
V 304	2 SC2527	8 945 705 527
V 305	2SA1077	8 945 705 526
V 306	BC 558C	8 905 707 459
V 307		8 905 707 416
V 401	LM 833	8 945 901 909
V 402	UPC 1270H	8 945 901 660
V 403		8 905 705 250
V 404	2 SC2527	8 945 705 527
V 405	2SA1077	8 945 705 526
V 406	BC 558C	8 905 707 459
V 407	BC 548B	8 905 707 416
V 502	UPC 1270H	8 945 901 660
V 503	BD 135-10	8 905 705 250
V 504	2 SC2527	8 945 705 527
V 505	2SA1077	8 945 705 526
V 506	BC 558C	8 905 707 459
V 507	BC 548B	8 905 707 416
V 602	UPC 1270H	8 945 901 660
V 603	BD 135-10	8 905 705 250
V 604	2 SC2527	8 945 705 527
V 605	2SA1077	8 945 705 526
V 606	BC 558C	8 905 707 459
V 607	BC 548B	8 905 707 416
V 701	78 L15ACP	8 945 901 659
V 702	79 L15ACP	8 945 901 658
V 703	LM 833 N	8 945 901 909
V 801	TA 7317 P	8 945 901 657
V 802	BC 548B	8 905 707 416
V 803	BC 558B	8 905 707 458

Hinweis:

Handelsübliche Kondensatoren und Widerstände sind in der Ersatzteilliste nicht aufgeführt. Wir bitten Sie, diese Teile im Fachhandel zu beziehen.

Nota:

Des condensateurs et résistances commerciaux ne sont pas inclus dans la liste des pièces détachées. Veuillez acheter ces pièces chez votre spécialiste.

Note:

Commercially available cpacitors and resistors are not mentionded in the spare parts list. Kindly buy these parts from the specialized trade.

Nota:

No se indican en la lista de piezas de repuesto los condensadores y resistores de uso comercial. Les rogamos comprar esas piezas en el comercio especializado.